

AMENDMENTS TO THE CLAIMS

1 1. (Currently amended) A method for obtaining a current value of a Management Information
2 base (MIB) variable stored in a ~~managed network device~~ in a ~~network packet router~~,
3 the method comprising the steps of:
4 receiving a connection of a Web browser to a ~~first managed network device~~ ~~network~~
5 ~~packet router~~;
6 receiving at the ~~first managed network device~~ ~~network packet router~~ an HTTP request
7 message from the browser to obtain the current value of the MIB variable
8 from the ~~first managed network device~~ ~~network packet router~~ to which the
9 MIB variable value pertains;
10 receiving the current value of the MIB variable from the MIB of the ~~first managed~~
11 ~~network device~~ ~~network packet router~~ to which the MIB variable value
12 pertains; and
13 communicating the current value of the MIB variable from the ~~first managed network~~
14 ~~device~~ ~~network packet router~~ to which the MIB variable value pertains to the
15 browser using an HTTP reply message.

1 2. (Currently amended) The method of claim 1, further comprising the steps of:
2 creating and storing a MIB object tree in a memory of the ~~first managed network~~
3 ~~device~~ ~~network packet router~~;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;
6 communicating the electronic document to the Web browser.

1 3. (Currently amended) The method of claim 1, wherein the step of receiving the current
2 value of the MIB variable from the MIB of the ~~first managed network device~~ network
3 packet router includes the steps of creating and storing a MIB object tree in a memory
4 of the ~~first managed network device~~ network packet router; obtaining the MIB
5 variable from the MIB object tree in the memory of the ~~first managed network device~~
6 network packet router.

1 4. (Currently amended) The method of claim 1, further comprising the steps of:
2 creating and storing a MIB object tree in a memory of the ~~first managed network~~
3 device network packet router;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;
6 receiving a user selection of one of the MIB variables based on the electronic
7 document;
8 wherein the step of receiving the current value of the MIB variable from the MIB of
9 the ~~first managed network device~~ network packet router includes the step of
10 obtaining the MIB variable that is identified in the user selection from the
11 MIB object tree in the memory of the ~~first managed network device~~ network
12 packet router.

1 5. (Currently amended) The method of claim 1, further comprising the steps of:
2 receiving the HTTP request message to obtain the current value of the MIB variable
3 at an HTTP-SNMP interface;

4 creating an SNMP query that requests a current value of the MIB variable based on
5 the HTTP request message; and
6 communicating the SNMP query to an SNMP daemon of the ~~first managed network~~
7 ~~device~~ network packet router.

1 6. (Currently amended) The method of claim 1, further comprising the steps of:
2 communicating the current value of the MIB variable to the HTTP-SNMP interface;
3 creating and storing an HTML page that contains the current value of the MIB
4 variable; and
5 sending the HTML page to an HTTP daemon of the ~~first managed network device~~
6 network packet router.

1 7. (Original) The method of claim 1, further comprising the step of creating and storing
2 an executable software element in association with the Web browser, wherein the
3 executable software element is configured for packaging an SNMP query into the
4 request from the Web browser.

1 8. (Original) The method of claim 1, wherein the step of receiving a request from the
2 Web browser to obtain the current value of the MIB variable includes the step of
3 unpackaging an SNMP query that is packaged in the request from the Web browser to
4 identify the MIB variable.

1 9. (Currently amended) The method of claim 8, further comprising the step of sending
2 the SNMP query to an SNMP daemon of the ~~first managed network device~~ network
3 packet router.

1 10. (Original) The method of claim 8, wherein the step of returning the current value of
2 the MIB variable to the Web browser includes the step of repackaging the current
3 value of the MIB variable into an HTTP reply message.

1 11. (Currently amended) A network device, comprising:
2 a processor;
3 a Management Information Base (MIB) logically accessible by the processor and
4 comprising one or more stored values of MIB variables;
5 a Simple Network Management Protocol (SNMP) daemon executed by the processor;
6 a Hypertext Transfer Protocol (HTTP) daemon executed by the processor;
7 stored instructions for obtaining a current value of a Management Information base
8 (MIB) variable stored in a ~~managed network device~~ network packet router
9 which, when executed by the processor, cause the processor to carry out the
10 steps of:
11 receiving a connection of a Web browser to a ~~first managed network device~~
12 the network packet router;
13 receiving at the ~~first managed network device~~ network packet router an HTTP
14 request message from the browser to obtain the current value of the
15 MIB variable from the ~~first managed network device~~ network packet
16 router to which the MIB variable value pertains;
17 receiving the current value of the MIB variable from the MIB of the ~~first~~
18 ~~managed network device~~ network packet router to which the MIB
19 variable value pertains; and

20 communicating the current value of the MIB variable from the ~~first managed~~
21 network device network packet router to which the MIB variable value
22 pertains to the browser using an HTTP reply message.

1 12. (Currently amended) The network device of claim 11, wherein the instructions further
2 cause the processor to carry out the steps of:
3 creating and storing a MIB object tree in a memory of the ~~first managed network~~
4 device network packet router;
5 creating an electronic document that contains a representation of one or more MIB
6 variables of the MIB object tree;
7 communicating the electronic document to the Web browser.

1 13. (Currently amended) The network device of claim 11, wherein the step of receiving
2 the current value of the MIB variable from the MIB of the ~~first managed network~~
3 device network packet router includes the steps of creating and storing a MIB object
4 tree in a memory of the ~~first managed network device~~ network packet router ;
5 obtaining the MIB variable from the MIB object tree in the memory of the ~~first~~
6 ~~managed network device~~ network packet router .

1 14. (Currently amended) The network device of claim 11, wherein the instructions further
2 cause the processor to carry out the steps of:
3 creating and storing a MIB object tree in a memory of the ~~first managed network~~
4 device network packet router ;

5 creating an electronic document that contains a representation of one or more MIB
6 variables of the MIB object tree;
7 receiving a user selection of one of the MIB variables based on the electronic
8 document;
9 wherein the step of receiving the current value of the MIB variable from the MIB of
10 the ~~first managed network device~~ network packet router includes the step of
11 obtaining the MIB variable that is identified in the user selection from the
12 MIB object tree in the memory of the ~~first managed network device~~ network
13 packet router.

E 1 15. (Currently amended) The network device of claim 11, further comprising an HTTP-
2 SNMP interface which, when executed by the processor, causes the processor to carry
3 out the steps of:
4 receiving the HTTP request message to obtain the current value of the MIB variable
5 at an HTTP-SNMP interface;
6 creating an SNMP query that requests a current value of the MIB variable based on
7 the HTTP request message; and
8 communicating the SNMP query to an SNMP daemon of the ~~first managed network~~
9 device network packet router.
10 16. (Previously presented) The network device of claim 11, further comprising the steps
11 of:
12 communicating the current value of the MIB variable to the HTTP-SNMP interface;

13 creating and storing an HTML page that contains the current value of the MIB
14 variable; and

15 sending the HTML page to the HTTP daemon.

1 17. (Currently amended) A computer-readable medium carrying one or more sequences
2 of one or more instructions for obtaining a current value of a Management
3 Information base (MIB) variable stored in a ~~managed network device in a network~~
4 packet router, the one or more sequences of one or more instructions including
5 instructions which, when executed by one or more processors, cause the one or more
6 processors to perform the steps of:

7 receiving a connection of a Web browser to a ~~first managed network device~~ network
8 packet router;

9 receiving at the ~~first managed network device~~ network packet router an HTTP request
10 message from the browser to obtain the current value of the MIB variable
11 from the ~~first managed network device~~ network packet router to which the
12 MIB variable value pertains;

13 receiving the current value of the MIB variable from the MIB of the ~~first managed~~
14 ~~network device~~ network packet router to which the MIB variable value
15 pertains; and

16 communicating the current value of the MIB variable from the ~~first managed network~~
17 ~~device~~ network packet router to which the MIB variable value pertains to the
18 browser using an HTTP reply message.

1 18. (Original) The computer-readable medium as recited in claim 17, wherein the
2 instructions further cause the processor to carry out the steps of:
3 creating and storing a MIB object tree;
4 creating an electronic document that contains a representation of one or more MIB
5 variables of the MIB object tree;
6 communicating the electronic document to the Web browser.

1 19. (Currently amended) The computer-readable medium as recited in claim 17, wherein
2 receiving the current value of the MIB variable from the MIB of the ~~first managed~~
3 ~~network device network packet router~~ includes the steps of creating and storing a
4 MIB object tree in a memory of the ~~first managed network device network packet~~
5 ~~router~~; obtaining the MIB variable from the MIB object tree in the memory of the
6 ~~first managed network device network packet router~~.

1 20. (Currently amended) The computer-readable medium as recited in claim 17, wherein
2 the instructions further cause the processor to carry out the steps of:
3 creating and storing a MIB object tree in a memory of the ~~first managed network~~
4 ~~device network packet router~~;
5 creating an electronic document that contains a representation of one or more MIB
6 variables of the MIB object tree;
7 receiving a user selection of one of the MIB variables based on the electronic
8 document;

9 wherein receiving the current value of the MIB variable from the MIB of the ~~first~~
10 managed network device network packet router includes the step of obtaining
11 the MIB variable that is identified in the user selection from the MIB object
12 tree in the memory of the ~~first managed network device~~ network packet
13 router.

1 21. (Currently amended) The computer-readable medium as recited in claim 17, wherein
2 the instructions further cause the processor to carry out the steps of:
3 receiving the HTTP request message to obtain the current value of the MIB variable
4 at an HTTP-SNMP interface;
5 creating an SNMP query that requests a current value of the MIB variable based on
6 the HTTP request message; and
7 communicating the SNMP query to an SNMP daemon of the ~~first managed network~~
8 device network packet router.

1 22. (Currently amended) The computer-readable medium as recited in claim 17, wherein
2 the instructions further cause the processor to carry out the steps of:
3 communicating the current value of the MIB variable to the HTTP-SNMP interface;
4 creating and storing an HTML page that contains the current value of the MIB
5 variable; and
6 sending the HTML page to an HTTP daemon of the ~~first managed network device~~
7 network packet router.

1 23. (Currently amended) An HTTP browser program including a plug-in executable
2 software element configured for obtaining a current value of a Management
3 Information Base (MIB) variable stored in a ~~managed network device in a network~~
4 packet router and which, when executed by a processor that executes the browser,
5 causes the processor to carry out the steps of:
6 connecting the browser to the network ~~device~~ packet router;
7 translating an SNMP query to a HTTP request message;
8 communicating the HTTP request message from the browser to the network ~~device~~
9 packet router to obtain the current value of the MIB variable from the
10 ~~managed network device~~ packet router to which the MIB variable value
11 pertains;
12 receiving, in an HTTP reply message, the current value of the MIB variable from the
13 MIB of the network ~~device~~ packet router to which the MIB variable value
14 pertains; and
15 displaying the current value of the MIB variable using the browser.

1 24. (Currently amended) An applet executable in a browser program and configured for
2 obtaining a current value of a Management Information Base (MIB) variable stored in
3 a ~~managed network device~~ packet router in a network and which, when executed by
4 the browser, causes the browser to carry out the steps of:
5 connecting the browser to the network ~~device~~ packet router;
6 translating an SNMP query to a HTTP request message;

7 communicating the HTTP request message from the browser to the network ~~device~~
8 ~~packet router~~ to obtain the current value of the MIB variable from the
9 ~~managed~~ network ~~device~~ ~~packet router~~ to which the MIB variable value
10 pertains;

11 receiving, in an HTTP reply message, the current value of the MIB variable from the
12 MIB of the network ~~device~~ ~~packet router~~ to which the MIB variable value
13 pertains; and

14 displaying the current value of the MIB variable using the browser.

1 25. (Previously presented) The network device of claim 11, wherein the step of receiving
2 a request from the Web browser to obtain the current value of the MIB variable
3 includes the step of unpackaging an SNMP query that is packaged in the request from
4 the Web browser to identify the MIB variable.

1 26. (Currently amended) The network device of claim 25, wherein the instructions further
2 cause the processor to carry out the step of sending the SNMP query to an SNMP
3 daemon of the ~~first~~ ~~managed~~ ~~network~~ ~~device~~ network packet router.

1 27. (Previously presented) The network device of claim 25, wherein the step of returning
2 the current value of the MIB variable to the Web browser includes the step of
3 repackaging the current value of the MIB variable into an HTTP reply message.

1 28. (Previously presented) The computer-readable medium of claim 17, wherein the step
2 of receiving a request from the Web browser to obtain the current value of the MIB

3 variable includes the step of unpackaging an SNMP query that is packaged in the
4 request from the Web browser to identify the MIB variable.

1 29. (Currently amended) The computer-readable medium of claim 28, wherein the
2 instructions further cause the processor to carry out the step of sending the SNMP
3 query to an SNMP daemon of the ~~first managed network device~~ network packet
4 router.

1 30. (Previously presented) The computer-readable medium of claim 28, wherein the step
2 of returning the current value of the MIB variable to the Web browser includes the
3 step of repackaging the current value of the MIB variable into an HTTP reply
4 message.

1 31. (Currently amended) A system for obtaining a current value of a Management
2 Information base (MIB) variable stored in a ~~managed network device in a network~~
3 packet router, the system comprising:
4 means for receiving a connection of a Web browser to a ~~first managed network device~~
5 network packet router;
6 means for receiving at the ~~first managed network device~~ network packet router an
7 HTTP request message from the browser to obtain the current value of the
8 MIB variable from the ~~first managed network device~~ network packet router to
9 which the MIB variable value pertains;
10 means for receiving the current value of the MIB variable from the MIB of the
11 network packet router to which the MIB variable value pertains; and

12 means for communicating the current value of the MIB variable from the ~~first~~
13 ~~managed network device~~ network packet router to which the MIB variable
14 value pertains to the browser using an HTTP reply message.

1 32. (Currently amended) The system of claim 31, further comprising:
2 means for creating and storing a MIB object tree in a memory of the ~~first managed~~
3 ~~network device~~ network packet router;
4 means for creating an electronic document that contains a representation of one or
5 more MIB variables of the MIB object tree;
6 means for communicating the electronic document to the Web browser.

1 33. (Currently amended) The system of claim 31, wherein the means for receiving the
2 current value of the MIB variable from the MIB of the ~~first managed network device~~
3 network packet router includes
4 means for creating and storing a MIB object tree in a memory of the ~~first managed~~
5 ~~network device~~ network packet router;
6 means for obtaining the MIB variable from the MIB object tree in the memory of the
7 ~~first managed network device~~ network packet router.

1 34. (Currently amended) The system of claim 31, further comprising:
2 means for creating and storing a MIB object tree in a memory of the ~~first managed~~
3 ~~network device~~ network packet router;
4 means for creating an electronic document that contains a representation of one or
5 more MIB variables of the MIB object tree;

6 means for receiving a user selection of one of the MIB variables based on the
7 electronic document;
8 wherein the means for receiving the current value of the MIB variable from the MIB
9 of the ~~first managed network device~~ network packet router includes means for
10 obtaining the MIB variable that is identified in the user selection from the
11 MIB object tree in the memory of the ~~first managed network device~~ network
12 packet router.

1 E 35. (Currently amended) The system of claim 31, further comprising:
2 means for receiving the HTTP request message to obtain the current value of the MIB
3 variable at an HTTP-SNMP interface;
4 means for creating an SNMP query that requests a current value of the MIB variable
5 based on the HTTP request message; and
6 means for communicating the SNMP query to an SNMP daemon of the ~~first managed~~
7 ~~network device~~ network packet router.

1 36. (Currently amended) The system of claim 31, further comprising:
2 means for communicating the current value of the MIB variable to the HTTP-SNMP
3 interface;
4 means for creating and storing an HTML page that contains the current value of the
5 MIB variable; and
6 means for sending the HTML page to an HTTP daemon of the ~~first managed network~~
7 ~~device~~ network packet router.

1 37. (Previously presented) The system of claim 31, further comprising:
2 means for creating and storing an executable software element in association with the
3 Web browser, wherein the executable software element is configured for
4 packaging an SNMP query into the request from the Web browser.

1 38. (Previously presented) The system of claim 31, wherein the means for receiving a
2 request from the Web browser to obtain the current value of the MIB variable
3 includes means for unpackaging an SNMP query that is packaged in the request from
4 the Web browser to identify the MIB variable.

1 39. (Currently amended) The system of claim 38, further comprising means for sending
2 the SNMP query to an SNMP daemon of the ~~first managed network device~~ network
3 packet router.

1 40. (Previously presented) The system of claim 38, wherein the means for returning the
2 current value of the MIB variable to the Web browser includes means for repackaging
3 the current value of the MIB variable into an HTTP reply message.

1 41 (New) The method of Claim 1, wherein the step of receiving a connection comprises
2 receiving a connection to an HTTP daemon in the network packet router, and wherein
3 the step of receiving an HTTP request message comprises receiving an HTTP request
4 message at the HTTP daemon.

1 42 (New) The network device of Claim 11, wherein the instructions cause the processor
2 to carry out the step of receiving a connection by receiving a connection to an HTTP

3 daemon in the network packet router and the step of receiving an HTTP request
4 message by receiving an HTTP request message at the HTTP daemon.

1 43 (New) The computer-readable medium of Claim 17, wherein the instructions cause
2 the one or more processors to perform the step of receiving a connection by receiving
3 a connection to an HTTP daemon in the network packet router and the step of
4 receiving an HTTP request message by receiving an HTTP request message at the
5 HTTP daemon.

1 44 (New) The system of Claim 31, wherein the means for receiving a connection
2 comprises means for receiving a connection to an HTTP daemon in the network
3 packet router, and wherein the means for receiving an HTTP request message
4 comprises means for receiving an HTTP request message at the HTTP daemon.
